How to Geocode In ArcGIS Desktop

Prepare the Excel Spreadsheet

Microsoft Excel spreadsheets are common resources to geocode in ArcMap. The Excel spreadsheet should be formatted and cleaned prior to geocoding, in order to maximize the geocoding match percentage.

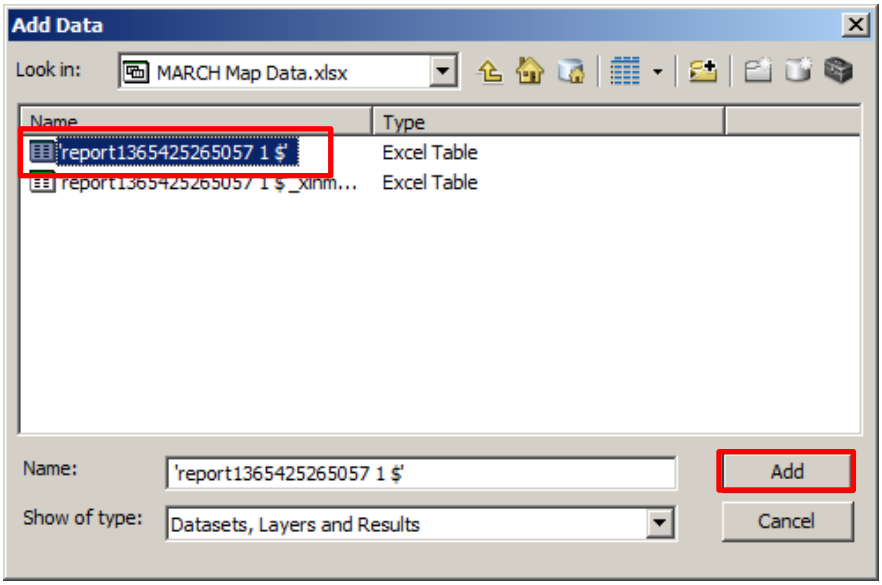
The following format, or similar, is recommended before proceeding to geocode:

FIELD NAME	FIELD TYPE	FIELD SPECS	DESCRIPTION
Name	Text	255	Name of the point location
Address1	**Text**	**255**	**Street number and street name**
Address2	Text	255	Secondary info. (i.e. – Building, Suite, Unit)
City	Text	255	City of the point location
State	Text	255	State of the point location
ZIP	**Text**	**255**	**ZIP code of the point location**

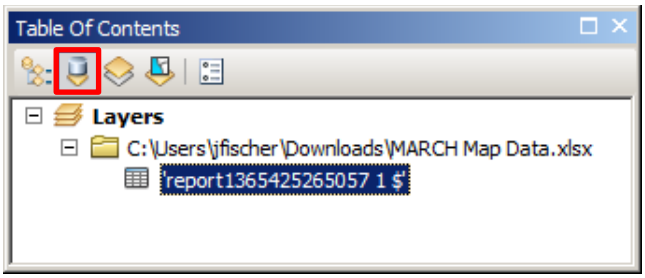
*Note: **Bold** fields are minimally required fields for geocoding.*

1. Open ArcMap
2. In ArcMap, Click the Add Data button to navigate to the spreadsheet to be geocoded

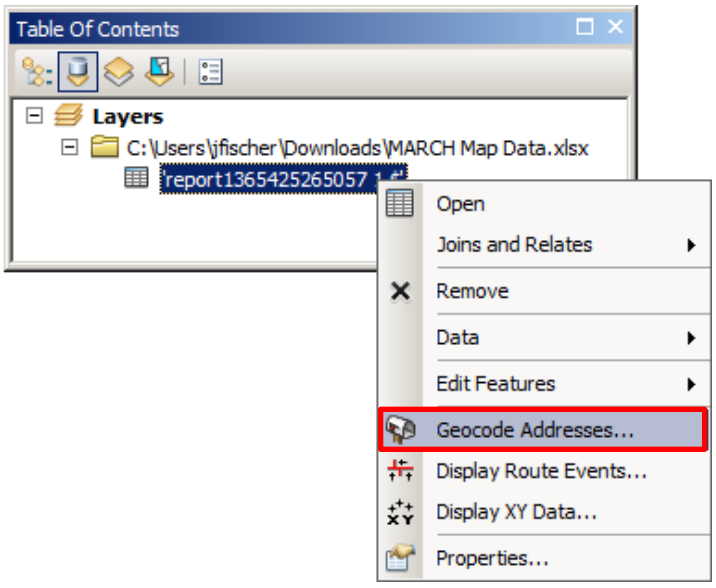
3. Select the Excel spreadsheet worksheet to be geocoded and Click Add



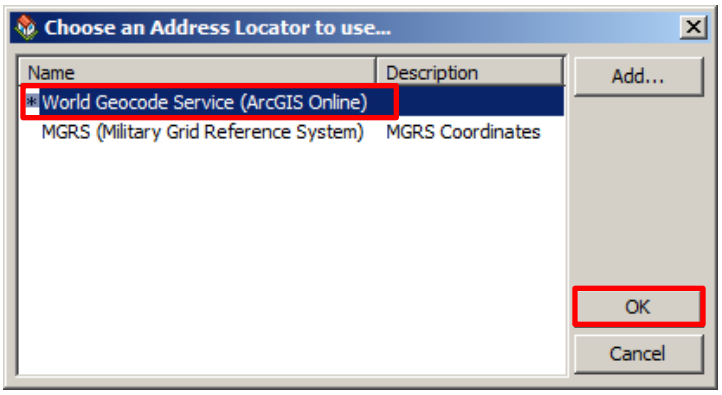
4. Click the List By Source button at the top of the Table of Contents to access the added worksheet



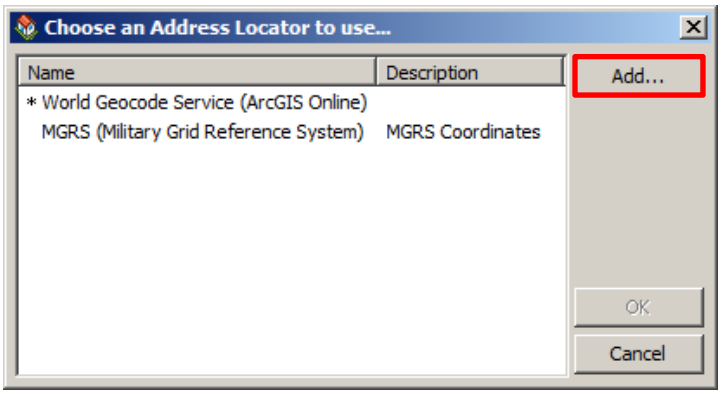
5. Right click the worksheet and Select Geocode Addresses…



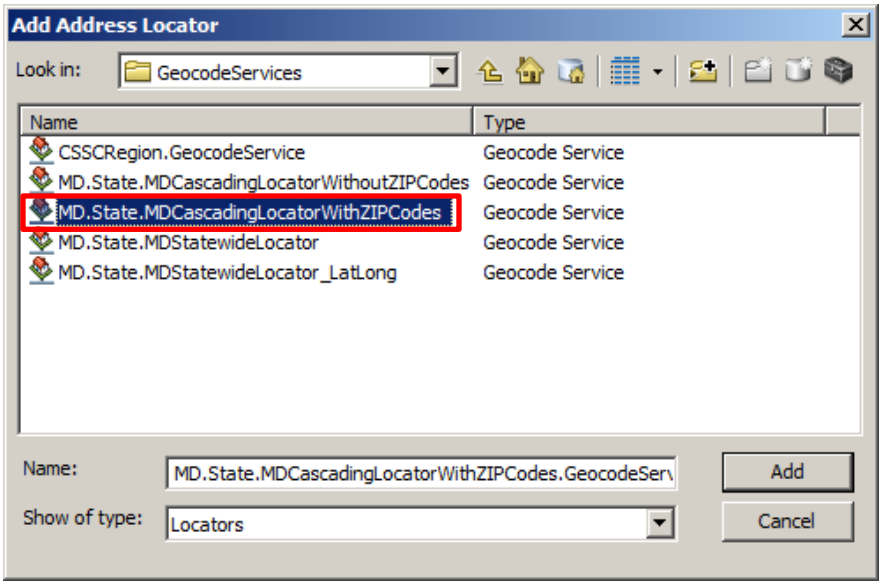
6a. If the geocoder is already in the list, click the desired geocoder and Click OK and proceed to Step 10.



6b. If the geocoder is not available in the list, Click Add



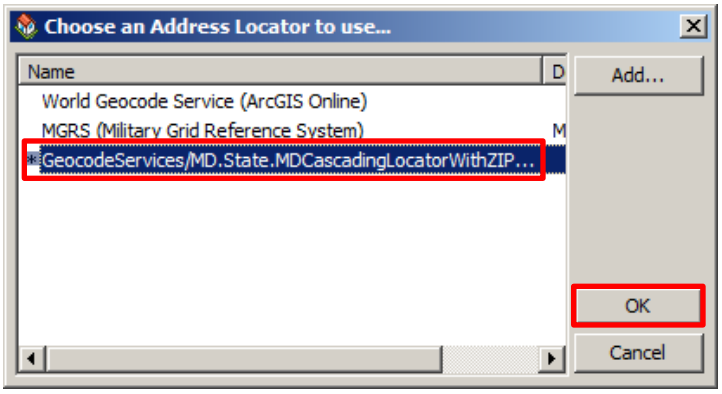
7b. Navigate to the desired geocoder, Select it and Click Add



For access to the MD iMap geocoder, make sure a GIS Server connection has been made to the MD iMap Server. If a GIS Server connection has not been made to the MD

iMap Server, please use the “How To Add Map Services to ArcGIS Desktop” for instructions on how to make this connection.

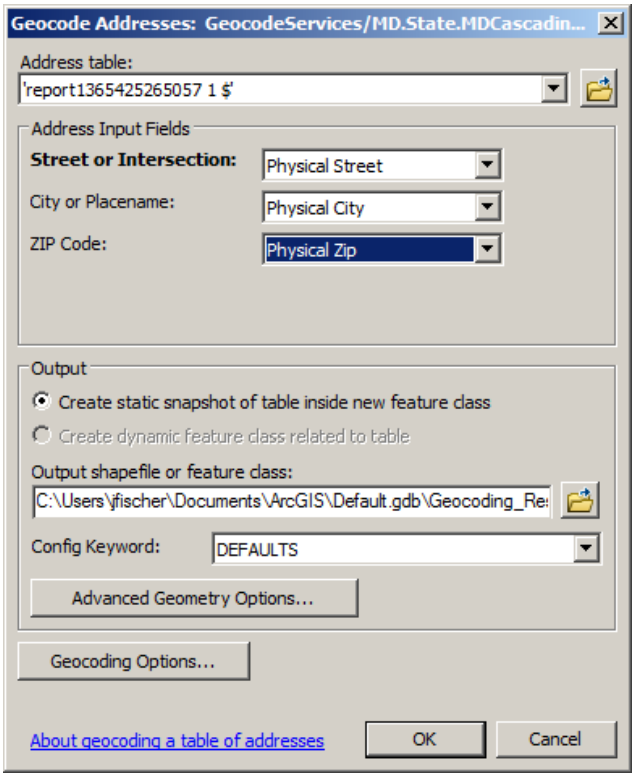
8b. The selected geocoder will not appear in the Choose an Address Locator to use… windows list. Select the desired geocoder and Click OK



9b. Once a GIS Server connection is established, navigate to GIS Servers (arcgis on mdimap.us) > Geocode Services > MD.State.MDCascadingLocatorWithZIPCodes

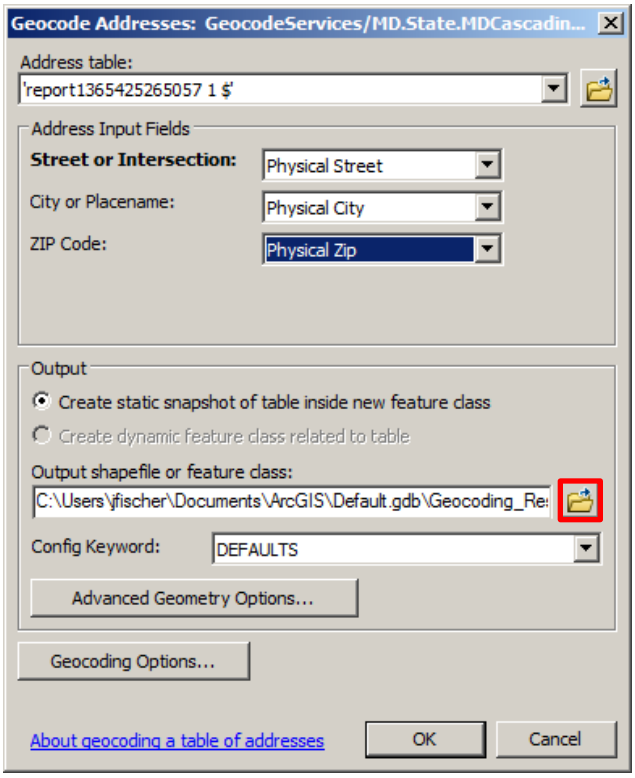
Note: The following steps are specific to the MD.State.MDCascadingLocatorWithZIPCodes from MD iMap. Other geocoders will have different specifics and input requirements. Please find support for other geocoders at http://www.esri.com

10. Enter the appropriate information in the Geocode Address form. Use the dropdowns to match the input fields with the worksheet fields.



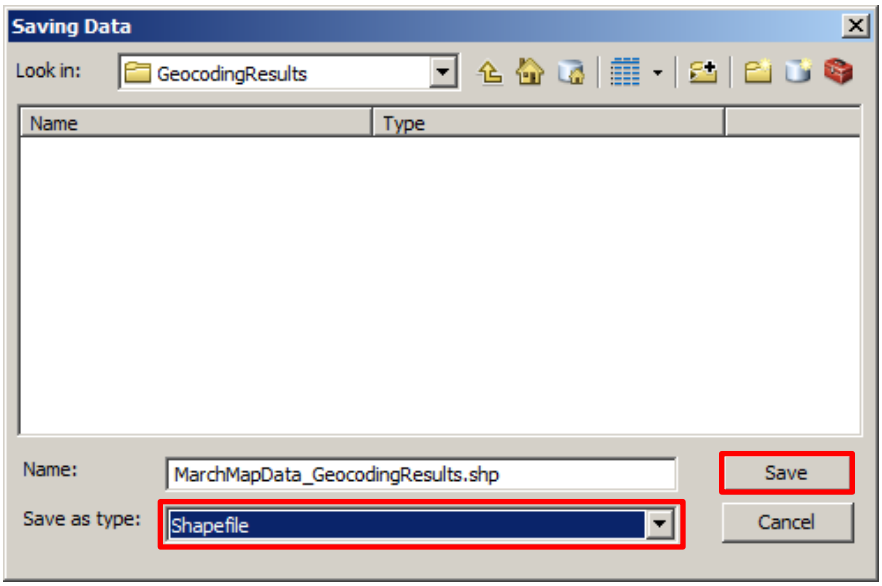
Note: The following link provides instructions on how best to format table syntax when using the cascading geocoder. This is especially useful for address fields consisting of mile markers, place names, highway exits and intersections. http://imap.maryland.gov/Documents/CompositeLocatorInstructions.pdf

11. Click the folder to the right of “Output shapefile or feature class:” and navigate to the output location for the geocoding results



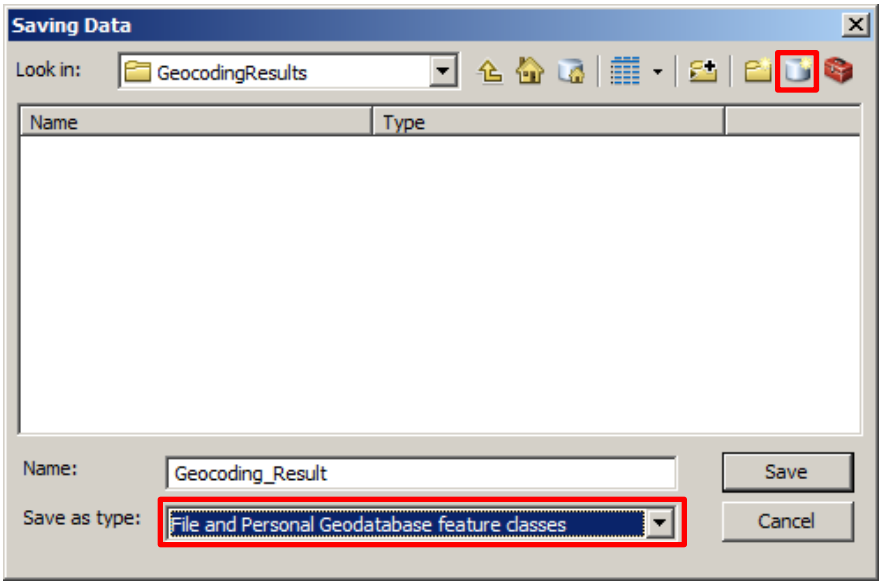
Geocoding results can be output as a shapefile of a feature class

12a. If the output geocoding results are being saved as a shapefile, set the "Save as type:" dropdown to Shapefile, provide a name for the shapefile and Click Save and proceed to Step 15

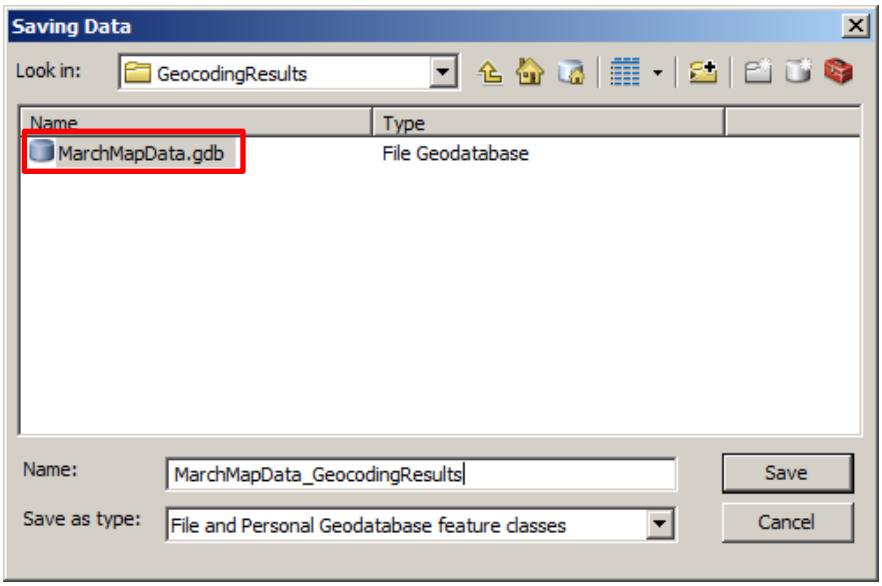


12b. If the output geocoding results are being saved as a feature class, set the "Save as

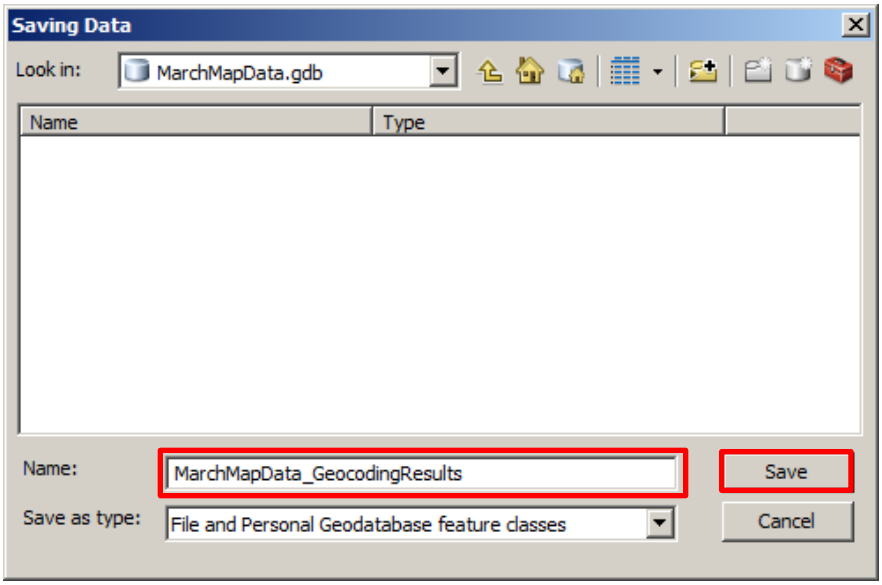
type:" dropdown to File and Personal Geodatabase feature classes and Click the New File Geodatabase button.



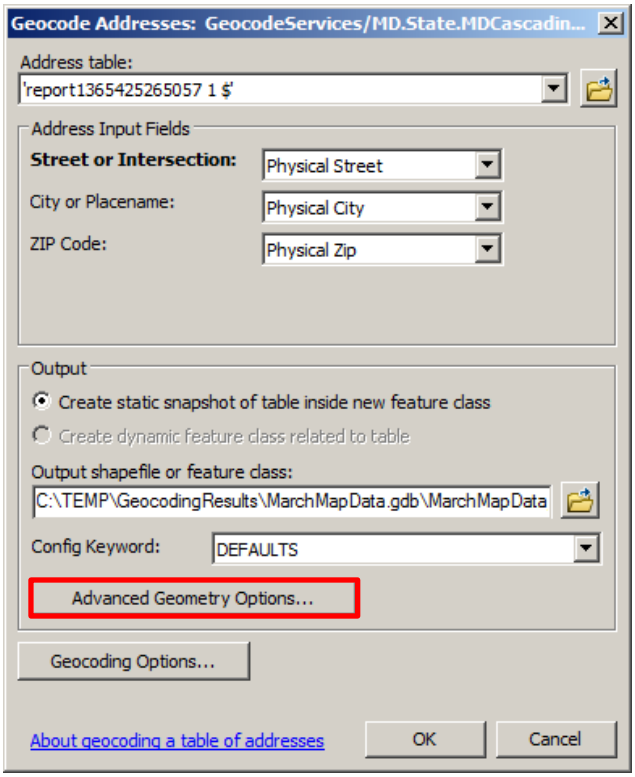
13b. Rename the file geodatabase and double click the file geodatabase.



14b. Provide a name for the feature class and Click Save



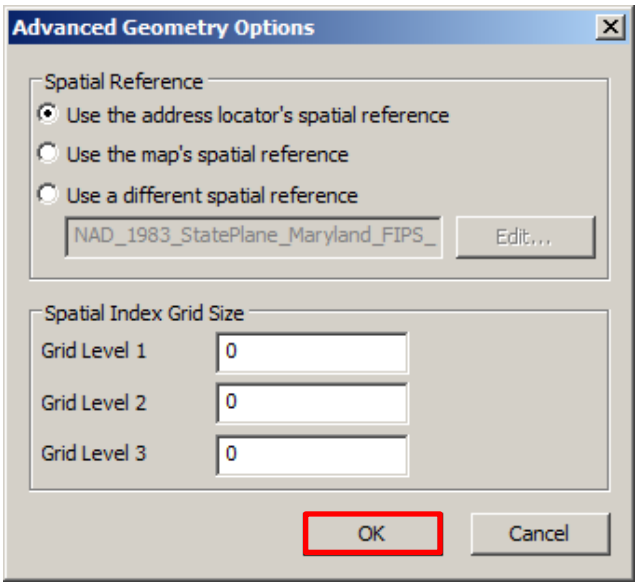
15. Click Advanced Geometry Options



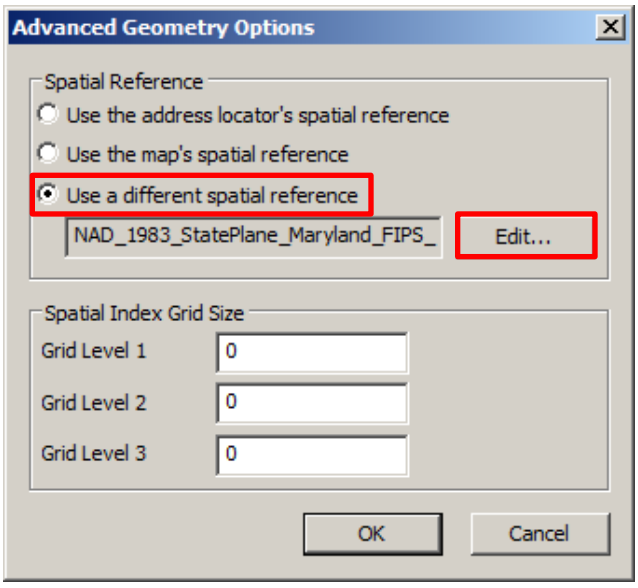
Make sure the Spatial Reference is set appropriately. For most of the geocoding in Maryland the Spatial Reference should be “NAD 1983 StatePlane Maryland FIPS 1900 (meters).prj”

16a. If the Spatial Reference is already set to the desired spatial reference, Click OK and

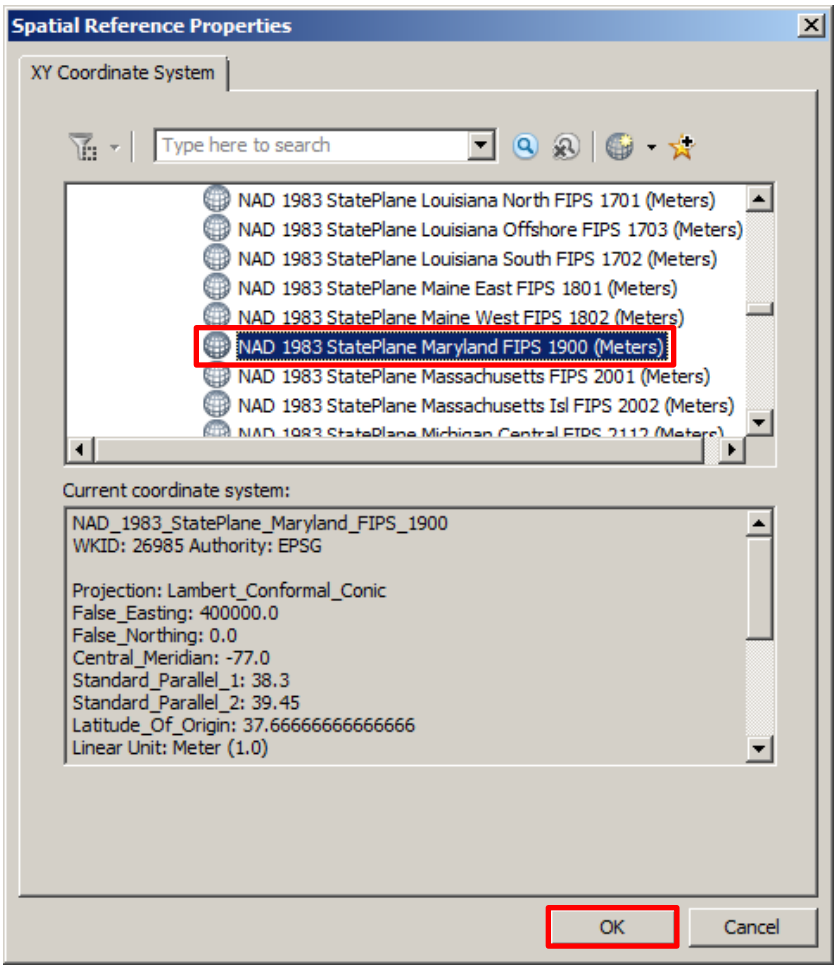
proceed to Step 19.



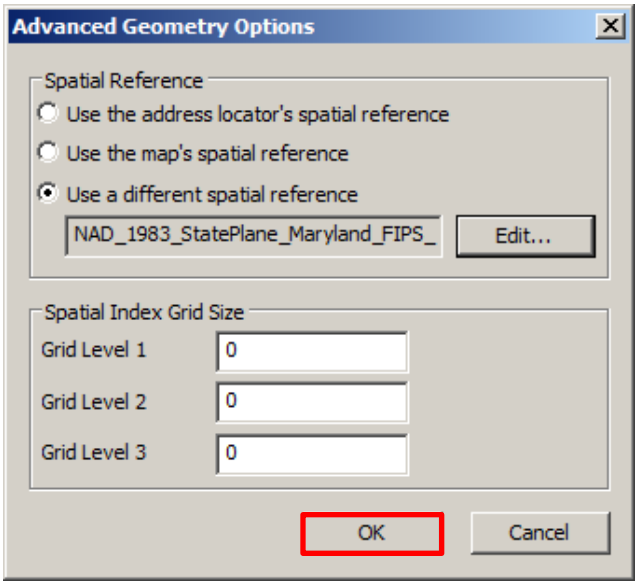
16b. To set the Spatial Reference manually, select the radio button “Use a different spatial reference” and Click Edit



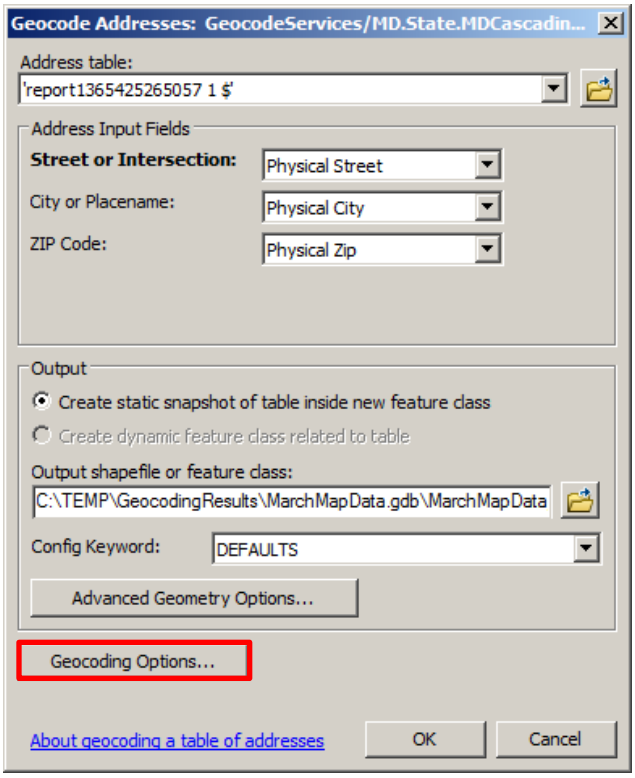
17b. Navigate to the desired spatial reference, click and Click OK



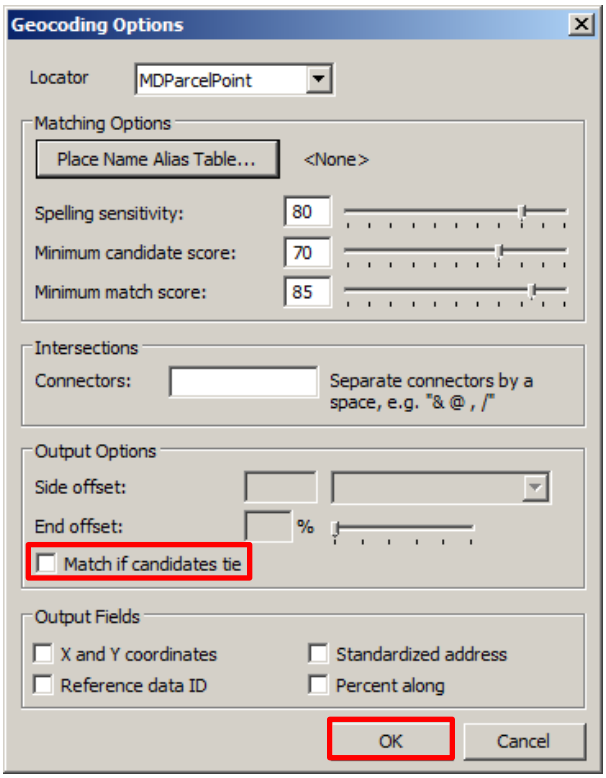
18b. Click OK



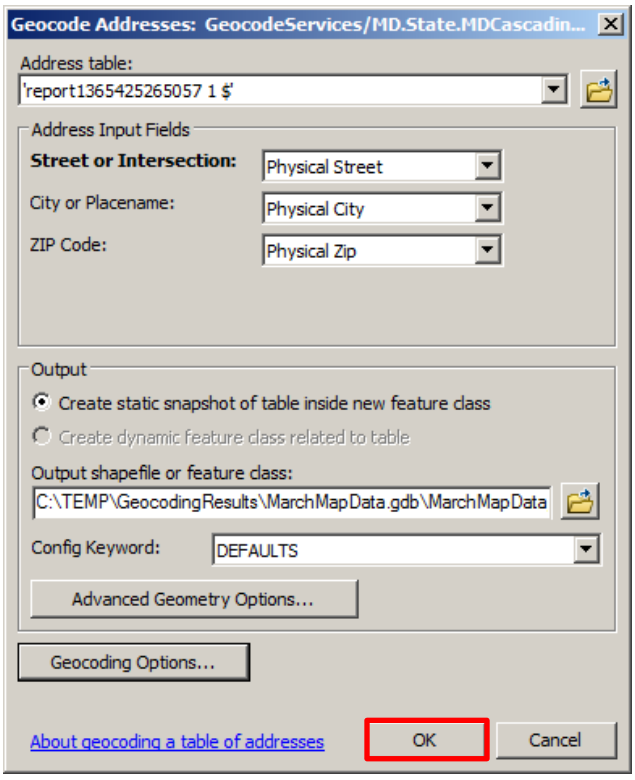
19. Click Geocoding Options



20. Recommended settings are to uncheck “Match if candidates tie” under Output Options, if not already unchecked and the remainder of the settings remain as the default settings. Click OK

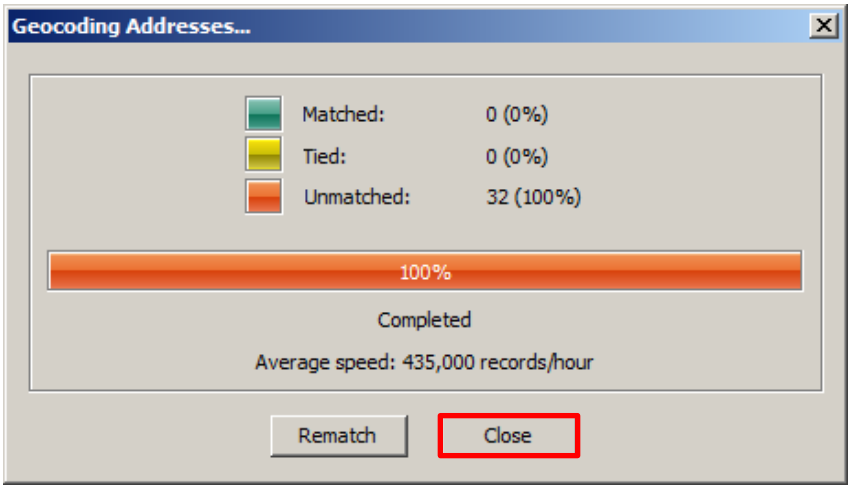


21. Click OK to run the geocoding process



A screen will appear to indicate how long the geocode will take to complete, the progress and the final tally of what matched and what was unmatched. Rarely will you get 100% for matching, so Rematch will need to be employed to get the percentage match to 100%.

22. Click Close



23. Click the List By Drawing Order button at the top of the Table of Contents to access the added data. The data will also be displayed in the main mapping window.